PRODUCT TECHNICAL DATA SHEET
No. 144 - 1
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JSC "Mida LT"
Gamyklos 19, Gargzdai, Lithuania

GENERAL INFORMATION:

PRODUCT: Bitumen shingles **FORCE BEAVER, YOGA BEAVER, YOGA BIBER, YOGA BEAVER PLUS, FORCE BEAVER S, YOGA BEAVER S, YOGA BEAVER S PLUS- type 5B4E21.**
Produced in accordance with ETA- 12/0234. Low bitumen mass shingles with mineral reinforcement. The shingles are made of glass fibre mat reinforcement, which is coated with SBS (Styrene-Butadiene-Styrene) modified bitumen with mineral fillers. Shingles are surfaced on the upperside with coloured mineral granules and on the underside with fine-grained sand.

MANUFACTURER: JSC "Mida LT", Gamyklos 19, Gargzdai
ORIGIN: Lithuania

INTENDED USE: Discontinuously laid roof covering for buildings.
The bitumen shingles are tiled on pitched roofs the inclination of which is ≥12°.
The bitumen shingles are used for installation of the new roofs and reconstruction of the old ones.

METHOD OF APPLICATION: To the smooth and continuous basis of pitched roofs fastens mechanically with roofing nails according to manufacturer installation instruction.

TECHNICAL DATA:

Characteristics	Test method in the EN 544, ETA-12/0234, or other standards	Units	Requirements	Value or statement	Declarated tolerances
Mass of bitumen	EN 544 (6.2)	g/m^2	900	900	± 150
Height (H)	EN 544 (6.3)	mm	333	333	± 3,0
Width (W)	EN 544 (6.3)	mm	1000	1000	± 3,0
Thickness	ETA -12/0264	mm	2,8	2,8	± 5%
Tensile properties: maximum tensile force (width) maximum tensile force(height)	EN 12311-1	N/50 mm	 ≥ 600 ≥ 400	 800 600	 ± 200 ± 200
Resistance to tearing (nail shank)	EN 12310-1	N	≥ 100	200	± 100
Water absorption	EN 544 (6.4.3)	%	≤ 2	≤ 2	
Resistance to UV radiation	EN 1297, ETA- 12/0264		60 cycles	Pass 60 cycles	
Resistance to heat ageing	EN 544, ETA- 12/0264		Pass	Pass	
Blistering	EN 544 (6.4.5), ETA- 12/0264		Pass	Pass	
Flow resistance at elevated temperature	EN 1110	°C	≤2 mm at 90 °C	Pass at 100^{0}C	
Adhesion of granules and flakes of slate	EN 12039	g	≤ 2,5	≤ 2,5	
External fire performance	CEN/TS 1187	–	In accordance with EN 13501-5	Broof (t1)*	
Reaction to fire	EN ISO 11925-2	–	EN 13501-1+A1	E	

* Refer to FIRE RESEARCH CENTRE Reaction to fire testing division, notified body 1796, external fire exposure to roofs classification report

REFERENCES OF MANUFACTURER:
The packages with shingles should be stored and transported in horizontal position combined on pallets and should be protected against moisture, heat, and mechanical damage.
The minimal temperature of installation is 6 °C.
In the cold season, the packages with shingles should be kept in a warm, dry place at the temperature more than +20°C for not less than 24 hours before use.
When using bitumen fixing mastic, please apply it in thin layer not exceeding 1 mm in thickness.